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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER
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ART UNIT	PAPER NUMBER
2168	

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Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
Office Action Summary	10/602,126	DON ET AL.
	Examiner	Art Unit	
	Jay A. Morrison	2168	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>*24 June 2003*</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-33* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-33* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *24 June 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

1.   Claims 1-33 are pending.

Specification

The use of the trademarks Microsoft SQL Server and Microsoft Exchange has

been noted in this application. They should be capitalized wherever they appear and be

accompanied by the generic terminology.

Although the use of trademarks is permissible in patent applications, the

proprietary nature of the marks should be respected and every effort made to prevent

their use in any manner which might adversely affect their validity as trademarks.

Claim Objections

2.   Claims 17 and 27 are objected to because of the following informalities:

      a.   As per claim 17, line 8: period at end of paragraph should be a semicolon.

      b.   As per claim 27: "sequel server" should be "sql server".

Appropriate correction is required.

Applicant is advised that should claim 20 be found allowable, claim 19 will be

objected to under 37 CFR 1.75 as being a substantial duplicate thereof. When two

claims in an application are duplicates or else are so close in content that they both

cover the same thing, despite a slight difference in wording, it is proper after allowing

one claim to object to the other as being a substantial duplicate of the allowed claim.

See MPEP § 706.03(k).

Claim Rejections - 35 USC § 112

3.   The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly
> claiming the subject matter which the applicant regards as his invention.

Claim 33 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite

for failing to particularly point out and distinctly claim the subject matter which applicant

regards as the invention.

Claim 33 recites the limitation "the one or more object tables" in lines 2-3. There

is insufficient antecedent basis for this limitation in the claim.

Claims 4,6,14, and 29 contain the trademark/trade name Microsoft SQL Server

and Microsoft Exchange. Where a trademark or trade name is used in a claim as a

limitation to identify or describe a particular material or product, the claim does not

comply with the requirements of 35 U.S.C. 112, second paragraph. See *Ex parte*

Simpson, 218 USPQ 1020 (Bd. App. 1982). The claim scope is uncertain since the

trademark or trade name cannot be used properly to identify any particular material or

product. A trademark or trade name is used to identify a source of goods, and not the

goods themselves. Thus, a trademark or trade name does not identify or describe the

goods associated with the trademark or trade name. In the present case, the

trademark/trade names are used to identify/describe Microsoft SQL Server and

Microsoft Exchange and, accordingly, the identification/descriptions are indefinite.

Claim Rejections - 35 USC § 102

4.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the
United States before the invention thereof by the applicant for patent, or on an international application
by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this
title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act

of 1999 (AIPA) and the Intellectual Property and High Technology Technical

Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting

directly or indirectly from an international application filed before November 29, 2000.

Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior

to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 1-3,7-13,16-27,30-33 are rejected under 35 U.S.C. 102(e) as being

anticipated by Wong et al., Patent Number 6,889,229.

With respect to claim 1, Wong teaches

"an act of creating a special table in the database of the back end server, the

special table including one or more fields for storing data identifying data types and

code for enabling use of the data types" (column 6, lines 14-30, whereas Wong's data

structure that defines user-defined type and associated data dictionary definition is

equivalent to the claimed special table for data that identifies data types and code for enabling their use);

"an act of identifying a data type to be deployed" (column 18, lines 53-63, whereas Wong's propagation of changes is equivalent to the claimed act of identifying);

"an act of obtaining an extended assembly that corresponds to the data type to be deployed, the extended assembly including the data from the special table identifying the data type and the code for enabling use of the data type" (column 6, line 52 through column 7, line 4, whereas Wong's data dictionary is equivalent to the claimed extended assembly);

"and an act of transmitting the extended assembly to one or more middle tier servers in the multi-tier system" (column 7, lines 22-33, whereas Wong's data sent from existing server to new server is equivalent to the claimed transmitting of assembly to servers in the system).

With respect to claim 2, Wong teaches

"an act of creating logic modules in the one or more middle tier servers that enable utilization of the extended as assembly" (column 7, lines 57-65, whereas Wong's placing data into the data dictionary of the new site is equivalent to the claimed creation of modules in middle tier servers that enable utilization).

With respect to claim 3, Wong teaches

"the back end server includes a relational database" (column 7, lines 33-57).

With respect to claim 7, Wong teaches

"the act of identifying the data type to be deployed includes determining that the

one or more middle tier servers has requested or does not yet enable use of the data

type" (column 7, lines 5-33, whereas Wong's new master site not holding information

about user-defined type is equivalent to the claimed determining server which does not

enable use of data type).

With respect to claim 8, Wong teaches

"an act of adding a new middle tier server to the multi-tier system, and wherein

the new middle tier server comprises the one or more middle tier servers that has

requested or does not yet enable use of the data type" (column 7, lines 5-21, whereas

Wong's new master site is equivalent to the claimed new middle tier server).

With respect to claim 9, Wong teaches

"an act of creating one or more object tables that are linked to the special table

and that include additional information defining the data type to be deployed, such that

the extended assembly also includes the additional information" (column 7, lines 33-43,

whereas Wong's creating the database object on the new master site using the

replicated data dictionary definition is equivalent to the claimed creation of object tables

including additional information).

With respect to claim 10, Wong teaches

"an act of modifying a special table in the database of the back end server, the special table including one or more fields for storing data that identifies data types and includes corresponding code for enabling use of the data types, the act of modifying including at least one of modifying the stored data and adding new stored data to the one or more fields" (column 15, lines 41-50, whereas Wong's data or changes referencing leaf attributes are equivalent to the claimed modification of a special table);

"an act of identifying a data type to be deployed" (column 18, lines 53-63, whereas Wong's propagation of changes is equivalent to the claimed act of identifying);

"an act of obtaining an extended assembly that corresponds to the data type to be deployed, the extended assembly including at least one of the modified stored data and the new stored data" (column 6, line 52 through column 7, line 4, whereas Wong's data dictionary is equivalent to the claimed extended assembly);

"and an act of transmitting the extended assembly to one or more middle tier servers in the multi-tier system" (column 7, lines 22-33, whereas Wong's data sent from existing server to new server is equivalent to the claimed transmitting of assembly to servers in the system).

With respect to claim 11, Wong teaches

"an act of determining which of one or more middle tier servers should be sent the extended assembly" (column 7, lines 5-33, whereas Wong's new master site not

holding information about user-defined type is equivalent to the claimed determining

server should be sent the assembly).

With respect to claim 12, Wong teaches

"the extended assembly enables use of the data type to be deployed at the one

or more middle tier servers that have been determined to be sent the extended

assembly" (column 7, lines 33-43, whereas Wong's new master using replicated data

dictionary descriptions to create a database object is equivalent to the claimed extended

assembly enabling use of the data type at the server).

With respect to claim 13, Wong teaches

"the back end server includes a relational database" (column 7, lines 33-57).

With respect to claim 16, Wong teaches

"the act of modifying includes adding new stored data corresponding to a new

data type not previously enabled in the multi-tier system prior to adding the new stored

data" (column 18, lines 53-62, whereas Wong's transferring the contents of the

database object when it is first instantiated is equivalent to the claimed adding of new

stored data which corresponds to new data type not previously enabled).

With respect to claim 17, Wong teaches

"an act of adding a new middle tier server to the multi-tier system, the new middle tier server being configured to utilize extended assemblies that are obtained from the back end server, the extended assemblies being configured to enable the use of one or more data types that are defined by data and enabled by code that is contained in the extended assemblies an act of determining which of the one or more data types are to be deployed from the back end server to the new middle tier server" (column 7, line 5-65, whereas Wong's new master site is equivalent to the claimed new middle tier server and Wong's data from the data dictionary which describes a database object are equivalent to the claimed extended assemblies);

"an act of obtaining one or more extended assemblies corresponding to the one or more data types that have been determined to be deployed, each of the one or more extended assemblies including data and code obtained from a special table stored in the database of the back end server" (column 6, line 52 through column 7, line 4, whereas Wong's data dictionary is equivalent to the claimed extended assembly);

"and an act of transmitting, to the middle tier server, the one or more extended assemblies that correspond to the one or more data types that have been determined to be deployed" (column 7, lines 22-57, whereas Wong's data dictionary sent from existing server to new server is equivalent to the claimed transmitting of assembly to servers).

With respect to claim 18, Wong teaches

"the act of determining is based at least in part on the capabilities of the new middle tier server" (column 7, lines 43-57, whereas Wong's server unable to process the data is equivalent to the claimed capabilities of the new server).

With respect to claim 19, Wong teaches

"the act of determining is based at least in part on a request by the new middle tier servers for data to enable use of one or more data types" (column 7, lines 43-65, whereas the database server on the new master site not finding the name in the data structure and automatically moving the data defining the user-defined type from the existing master site to the new master site is equivalent to determining being based at least in part on a request from the new server to enable use of data types).

With respect to claim 20, Wong teaches

"the act of determining is based at least in part on a request by the new middle tier servers for data to enable use of one or more data types" (column 7, lines 43-65, whereas the database server on the new master site not finding the name in the data structure and automatically moving the data defining the user-defined type from the existing master site to the new master site is equivalent to determining being based at least in part on a request from the new server to enable use of data types).

With respect to claim 21, Wong teaches

"an act of creating a special table in the database of the back end server, the

special table including one or more fields for storing data identifying a data type and

code for enabling use of the data type" (column 6, lines 14-30, whereas Wong's data

structure that defines user-defined type and associated data dictionary definition is

equivalent to the claimed special table for data that identifies data types and code for

enabling their use);

"a step for deploying the data type from the back end server to the one or more

middle tier servers" (column 7, lines 22-33, whereas Wong's data sent from existing

server to new server is equivalent to the claimed deploying of data type to servers in the

system).

With respect to claim 22, Wong teaches

"an act of identifying the data type to be deployed" (column 18, lines 53-63,

whereas Wong's propagation of changes is equivalent to the claimed act of identifying);

"an act of obtaining an extended assembly that corresponds to the data type to

be deployed, the extended assembly including the data from the special table identifying

the data type and the code for enabling use of the data type" (column 6, line 52 through

column 7, line 4, whereas Wong's data dictionary is equivalent to the claimed extended

assembly);

"and an act of transmitting the extended assembly to one or more middle tier

servers in the multi-tier system" (column 7, lines 22-33, whereas Wong's data sent from

existing server to new server is equivalent to the claimed transmitting of assembly to

servers in the system).

With respect to claim 23, Wong teaches

"an act of creating logic in the one or more middle tier servers that enables

utilization of the extended assembly" (column 7, lines 57-65, whereas Wong's placing

data into the data dictionary of the new site is equivalent to the claimed creation of

modules in middle tier servers that enable utilization).

With respect to claim 24, Wong teaches

"an act of creating at least one object table that includes at least some

information defining the data type, and wherein the extended assembly includes the at

least some information" (column 7, lines 33-43, whereas Wong's creating the database

object on the new master site using the replicated data dictionary definition is equivalent

to the claimed creation of object tables including additional information).

With respect to claim 25,

This claim is rejected on grounds corresponding to the arguments given above

for rejected claim 1 and is similarly rejected.

With respect to claim 26,

This claim is rejected on grounds corresponding to the arguments given above

for rejected claim 2 and is similarly rejected.

With respect to claim 27, Wong teaches

"the back end server includes a sequel server" (column 7, lines 33-57, whereas

Wong's relational database is equivalent to the claimed sequel server).

With respect to claim 30-32, Wong teaches

These claims are rejected on grounds corresponding to the arguments given

above for rejected claims 7-9 and are similarly rejected.

Claim Rejections - 35 USC § 103

5.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of

the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of

the various claims was commonly owned at the time any inventions covered therein

were made absent any evidence to the contrary. Applicant is advised of the obligation

under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was

not commonly owned at the time a later invention was made in order for the examiner to

consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g)

prior art under 35 U.S.C. 103(a).

Claims 4-6, 14-15, and 28-29 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Wong et al., Patent Number 6,889,229, as applied to claims 1, 3, 13,

and 25 above, and further in view of Bowman-Amuah, Patent Number 6,578,068.

With respect to claim 4,

Wong does not explicitly indicate "a Microsoft SQL Server".

However, Bowman-Amuah teaches "a Microsoft SQL Server" (column 49, lines

48-49 and column 50, lines 1-14).

It would have been obvious to one of ordinary skill in the art at the time of the

invention to combine Wong and Bowman-Amuah because using the steps "a Microsoft

SQL Server" would have given those skilled in the art the tools to improve the invention

by allowing clients to connect to a server using conventional protocols. This gives the

user the advantage of being able to have the ability to quickly and easily implement

servers which are commonly used and available.

With respect to claim 5,

Wong does not explicitly indicate "email server".

However, Bowman-Amuah teaches "email server" (column 73, lines 39-47,

whereas Barrera's email service is equivalent to the claimed email server).

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine Wong and Bowman-Amuah because using the steps "a Microsoft SQL Server" would have given those skilled in the art the tools to improve the invention by allowing clients to connect to a server using conventional protocols. This gives the user the advantage of being able to have the ability to quickly and easily implement servers which are commonly used and available.

With respect to claim 6,

Wong does not explicitly indicate "a Microsoft Exchange Server".

However, Bowman-Amuah teaches "a Microsoft Exchange Server" (column 74, lines 33-35 and column 74, lines 59-68).

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine Wong and Bowman-Amuah because using the steps "a Microsoft SQL Server" would have given those skilled in the art the tools to improve the invention by allowing clients to connect to a server using conventional protocols. This gives the user the advantage of being able to have the ability to quickly and easily implement servers which are commonly used and available.

With respect to claim 14,

This claim is rejected on grounds corresponding to the arguments given above for rejected claim 4 and is similarly rejected.

With respect to claim 15,

This claim is rejected on grounds corresponding to the arguments given above

for rejected claim 5 and is similarly rejected.

With respect to claim 28,

This claim is rejected on grounds corresponding to the arguments given above

for rejected claim 5 and is similarly rejected.

With respect to claim 29,

This claim is rejected on grounds corresponding to the arguments given above

for rejected claim 6 and is similarly rejected.
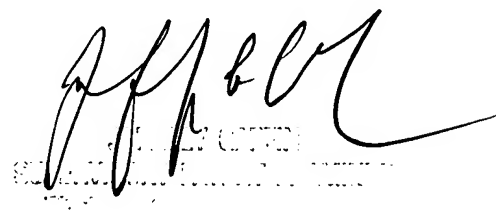

Conclusion

6.   The prior art made of record, listed on form PTO-892, and not relied upon is

considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Jay A. Morrison whose telephone number is (571) 272-

7112. The examiner can normally be reached on M-F 8-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Jeffrey A. Gaffin can be reached on (571) 272-4146. The fax phone number

for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

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For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

Jay Morrison   Jeffrey Gaffin
Assistant Examiner   Primary Examiner
TC2100   TC2100